

Report to: Policy & Performance Improvement Committee 28 November 2022

Director Lead: Matthew Finch, Communities and Environment Director

Lead Officer: Briony Ashton, Environmental Policy and Projects Officer

Report Summary	
Report Title	Climate Emergency Update
Purpose of Report	To provide an update to members on the progress of the Climate Emergency Strategy and associated Action Plan.
Recommendations	That the Policy & Performance Improvement Committee: <ul style="list-style-type: none"> a) Endorse the inclusion of Southwell Leisure Centre and new Council services in our net carbon neutral target and incorporated into the annual carbon footprint calculation going forwards; and b) Note the progress on the action plan and its key projects.
Reason for Recommendation	The inclusion of Southwell Leisure centre and new services within the carbon footprint calculation allows transparency and incorporates all buildings and services for which the is Council responsible. This work aligns with the Council’s Community Plan objective to “enhance and protect the district’s natural environment”. There is a specific activity under this objective to reduce the Council's carbon emissions by implementing an environmental strategy and carbon reduction action plan to achieve carbon neutrality.

1.0 Background

1.1 Newark and Sherwood District Council (NSDC) declared a Climate Emergency at the Full Council meeting of 16 July 2019. At this stage, the declaration did not include a target for net zero for the Council but recognised that the UK Government had, the preceding month, agreed a target of 2050.

1.2 Following the declaration, the Carbon Trust were appointed to work alongside officers and members to develop a Climate Emergency Strategy and Action Plan. The Climate Emergency Working Group (CEWG) met on several occasions to review the data and findings from the Carbon Trust, as well as to seek out views from partners, businesses, and local groups. The CEWG comprised of the Chairman, Vice-Chairman and Opposition Spokespersons of the Policy & Finance, Leisure & Environment, Economic Development, and Homes & Communities Committees. Members of the

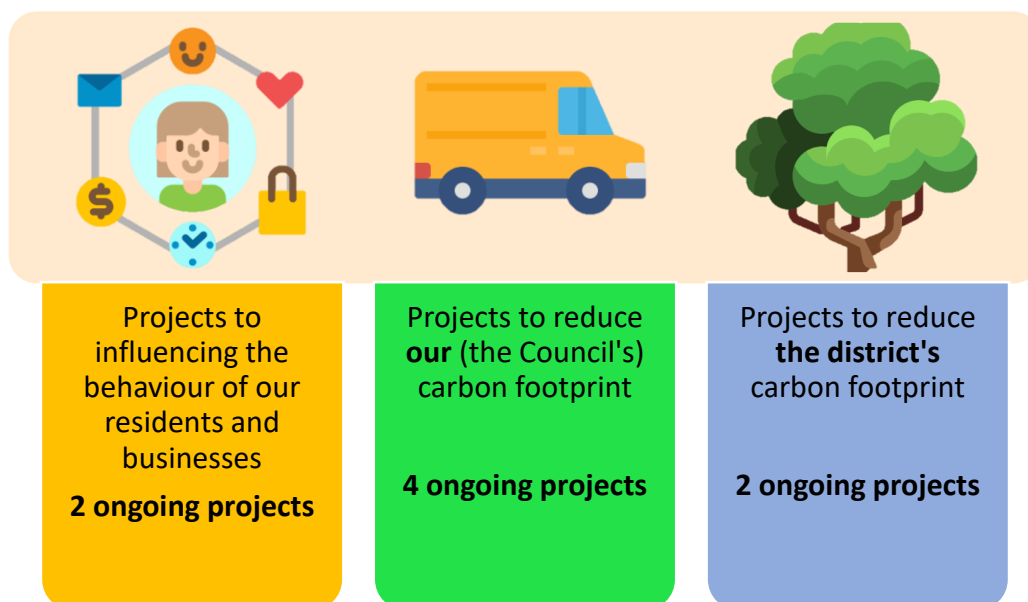
working group recommended the carbon net neutral target date of 2035, and a emissions reduction target in line with this aspiration. The Climate Emergency Strategy and both targets were approved by Policy and Finance Committee in September 2020 and Full Council in December 2020.

- 1.3 The Council's agreed target for reduction is 2,165 tCO₂e (gas and fuel consumption from scope 1, purchased electricity from scope 2, and waste and water from scope 3).
- 1.4 The Greening Newark and Sherwood Action Plan was developed to deliver the vision outlined in the Climate Emergency Strategy. This action plan is being progressed and an annual report of progress is made to members. This report informs members of the Council's progress towards the 2035 carbon neutrality target and provides an update on work ongoing to date to tackle Climate Change.

2.0 Ongoing Projects

Members can refer to previous update reports (March and September 2021) for previous works. This section of the report updated members on going work.

These ongoing projects fall into three themes as outlined below.



2.1 **Green Rewards App** (Behaviour change in residents)

- 2.1.1 The Green Rewards App is an online platform designed to incentivise and encourage users to undertake positive behaviour change by enabling users to log carbon reducing activities and gain points for these activities. Residents collect points for undertaking carbon avoidance measures, such as having a sustainable commute, learning about recycling or buying eco-friendly products. The points collected are honesty based and rely on users logging completed tasks. For some tasks you can only gain points once, for example completing the carbon quiz, whilst for other tasks, such as a recycling, users can connect points every week. The Green Rewards App launched to the rest of the County in November 2021, to coincide with COP26, and it launched to Newark and Sherwood residents on 16 February 2022. This made Nottinghamshire the first county to have a carbon focused platform available to all residents.

- 2.1.2 The platform features a leader board which enables residents to view where they sit in relation to other residents. Winners are selected on a monthly basis by the platform operator. There are two winners a month, both receiving a £20 voucher.
- The resident with the most points (each resident can only win once bi-annually), and
 - A randomly selected resident that has logged activities in the last month.
- 2.1.3 The project team will continue to review the progress of the App on a monthly basis to monitor uptake, analyse trends and ensure the App's continued promotion. So far 381 our residents have signed up and 26 tonnes of carbon has been avoided (as of 10/10/22). The next steps are to utilise ward data to promote healthy competition within the district and to work with transport providers to provide discounts for Green Rewards users.
- 2.1.4 We have signed up to the App for one year, this expires in January 2023, before expiry the success of the App will be reviewed. This review will consider the carbon savings attained, impact achieved and take up across the geography and demographics of the district. A recommendation on whether to continue with Green Rewards will then be taken to the Portfolio Holder for decision. If applicable in future years this review will consider the findings from an ongoing dissertation. A Sheffield University student is carrying out a dissertation project to study the effects and validity/feasibility of rewards-based incentivisation on positive climate change mitigation behaviour. The findings of this research will help inform use of the Green Rewards App.

2.2 Carbon Reduction Support (Behaviour Change in businesses and community groups)

- 2.2.1 We want to support businesses and community groups to make sustainable decisions. Firstly, we developed a new informational [webpage](#) which we circulated via our networks. As a second step, we are consulting with local businesses, community groups and parishes to understand what support and resources they would like to help them with their individual carbon reduction ambitions. As such, a survey went out to businesses, community groups and parishes throughout October 2022.
- 2.2.2 The next step, once the data has been analysed, will be to determine the individual requirements of each group, and decide if the establishment of a carbon neutral network would be beneficial for Newark and Sherwood. A report will be provided if the appetite from the survey respondents is deemed to be significant enough to allocate the resource to establish and maintain a group.

2.3 Solar PV installation (Reducing the Council's carbon footprint)

- 2.3.1 Our Climate Emergency Strategy Action plan outlines recommended carbon reduction initiatives which the Council can undertake in order to improve energy efficiency and reduce its overall carbon footprint. This includes the installation of Solar PV. As such the we undertook feasibility works in collaboration with specialist consultants to consider the intricacies of Solar PV installation on a range of its corporate and leisure sites in order to gain further understanding in relation to costs involved, payback, carbon savings and if installation is practical.

2.3.2 The outcome of the feasibility study was presented to members at Policy and Finance Committee in November 2021 with a £685,250 expenditure approved for installation on the below sites:

- Newark Sports and Fitness Centre
- Southwell Leisure Centre
- Dukeries Leisure Centre
- The Beacon
- Vicar Water

2.3.3 The installation contract has been awarded and we are currently in the process of finalising the contract, works are expected to begin at the chosen sites in 2023. The installation of the Solar PV will generate in excess of 400,000 kWh and save an estimated 90 tCO₂e per annum. The completion of this project will assist the Council with making carbon savings and generating renewable energy which will assist us with reaching our 2035 net carbon neutrality target.

2.4 Decarbonisation Plan (Reducing the Council's carbon footprint)

2.4.1 As part of the Climate Emergency action plan we are committed to delivering and installing low carbon heating measures at a range of Council buildings before 2035. The Carbon Trust recommended Air Source Heat Pumps as the low carbon technology. However, before installing this technology on large scale sites (which require significant heating) we must ensure this new technology is appropriate and consider all fossil fuel free options.

2.4.2 As such, work is underway to develop a specification document for the creation of a Newark and Sherwood Decarbonisation Plan for our corporate and leisure buildings. This plan will be created by specialist and will advise on the energy efficiency measures and carbon reduction improvements we can put in place at each site.

2.4.3 Over the past year we have submitted two separate bids to government funding streams, to fund the developed of this plan, both of which have been unsuccessful. The Council allocated significant resource into developing the bid, only to be left disappointed by the 'first come first serve' nature of the funding streams. This has been fed back to the funding pot operators and has been raised via our MP. As our bids for funding the development of this plan from central government have been unsuccessful this will now be funded from the Climate Change budget.

2.5 Brunel Drive Master Plan (Reducing the Council's carbon footprint)

2.5.1 The Climate Emergency action plan commits us to exploring the implementation of electric vehicles within the Council owned fleet of vehicles. It was agreed at Leisure and Environment Committee on 16 March 2021 to adopt a phased approach towards electrification. This began with the pilot of two vehicles which have been used by our Community Protection team for short journeys in the district within the past year.

2.5.2 This pilot is part of a long-term project to consider the Brunel Drive Depot site, and the surrounding area, and how we can accommodate electrical charging for our fleet as well as considering changes to the waste streams which we are currently collecting.

A project group was set up to consider the future of the site considering this aspiration. The group have met on several occasions and have appointed a contractor to provide detailed designs and an options appraisal, considering the site as is and the sites ability to meet future requirements.

- 2.5.3 A progress update will be presented to Cabinet in December 2022. Once a steer has been provided by members the project group will continue to work collaboratively to reach the preferred solution for the site to meet the future needs of the Councils fleet.

2.6 Climate Awareness Training (Reducing the Council's carbon footprint)

- 2.6.1 Climate Awareness training has been introduced to the internal training programme for the first time. This training will help ensure decision makers are aware of the Climate Emergency and are considering carbon reduction in decision making. For example, considering the impact that the implementation projects and policy may make on the district's carbon footprint. The training will be for both members and officers and will be rolled out from 2023.

- 2.6.2 The intention is that the training will encompass elements of the well-established and accredited 'Carbon Literacy' training and Newark and Sherwood specific element related to current and future projects and ambitions of the Council. Consideration will also be given for the new Climate Fresk training course which gained momentum following the COP26 event in 2021.

2.7 LAD2 Energy Efficiency Improvements to Homes (Reducing the district's carbon footprint)

- 2.7.1 LAD2 is a scheme which aims to raise the energy efficiency of low income and low energy performance homes. Focusing on homes with energy performance certificate (EPC) ratings of E, F or G. The Midland Energy Hub allocated Newark and Sherwood £724,850 of funding to carry out this work which enables cost saving for householders as well as carbon reduction, and the creation of green jobs via Regional Energy Hubs.

- 2.7.2 The LAD2 programme of works completed in September 2022, in partnership with Eon, and a total of 50 properties have been retrofitted with energy efficiency measures, enabling cost savings on energy bills and to support low-income households in Newark and Sherwood. This comprised of energy efficiency improvements in 36 private sector housing properties. 15 properties benefited from External Wall Insulation (EWI) and 21 properties had Solar PV panels installed. Whilst 14 properties owned by the Council (part of the Council's social housing portfolio) benefited from the installation of Solar PV panels.

2.8 Tree Planting (Reducing the district's carbon footprint)

- 2.8.1 As part of the Community Plan and Climate Emergency Strategy the Council committed to planting 10,000 trees by 2023. By the end of the 2021/22 planting season over 7,919 trees had been planted directly by the council. A further 10,133 trees have been given away as part of the free tree scheme to residents and local community groups.

2.8.2 We are now approaching the 2022/23 planting season, and the free tree giveaway will run again. Residents and community groups can already request a tree, to be planted for spring, and we have received 441 requests so far.

2.8.3 We are also taking part in the Sherwood Forest Trust project 'Trees for Climate' helping to identifying suitable areas for planting and woodland development in the district.

3.0 The Council's 2021-22 Carbon Footprint

3.1 As part of the Climate Emergency Strategy, and associated action plan, we have committed to monitoring and measuring our carbon emissions. This helps us be accountable to our residents. It also helps us identify areas of high carbon emissions suitable for targeted action.

3.2 Our target for reduction is 2,165 tCO₂e (gas and fuel consumption from scope 1, purchased electricity from scope 2, and waste and water from scope 3).

3.3 Full Council decided that the Council's housing stock would be excluded from this target. This decision still stands due to the estimated associated costs (circa £55million based on a 2020 estimate) and the requirement for clear direction and funding from national government to progress with this agenda.

3.4 The baseline carbon emissions (meaning the carbon footprint of the Council), was first measured in 2020, and the baseline was agreed at Full Council in December 2020. However, since the setting of this baseline with the Carbon Trust, the Council has undergone some key service changes impacting on its emissions, such as;

- We now deliver our garden waste service in house, which increased the fleet by two waste trucks,
- We have increased the scale of our Grounds Maintenance works, including taking on the maintenance of HRA land, which increased the fleet by five vehicles,
- The addition of the 4 Community Protection Officers, and their 2 vehicles,
- An additional vehicle to run the targeted action street scene team,
- Management of Southwell Leisure Centre, and
- The installation of a pool at the Dukeries Leisure Centre.

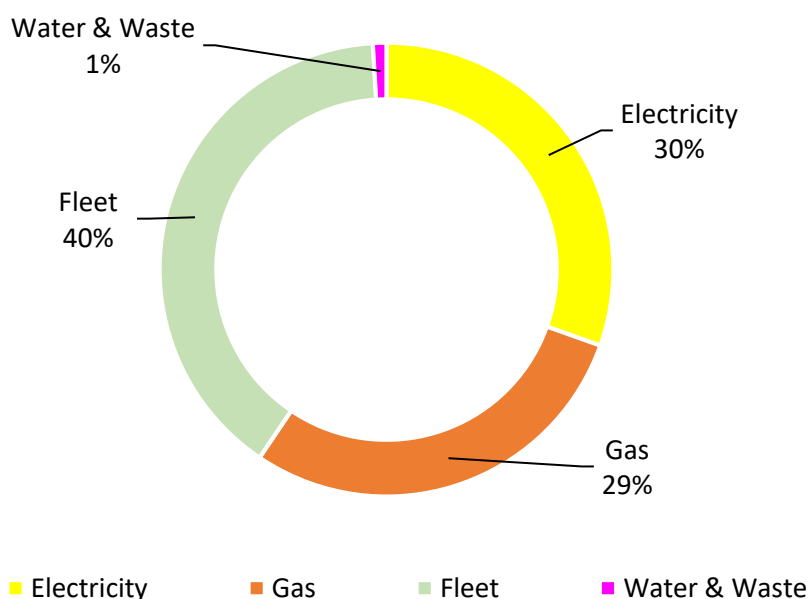
3.5 These approved key service changes have undoubtedly had an impact on our carbon footprint, these changes nonetheless have been essential in order to provide these essential services to our residents.

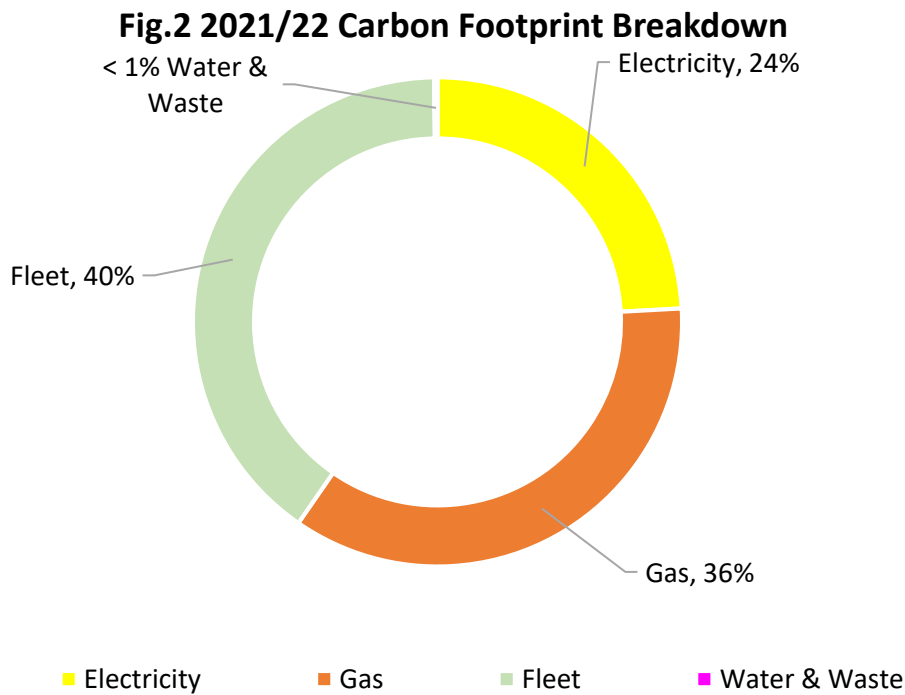
3.6 It is important to recognise the significance of the decisions we have made since 2018/2019 and that these have had an impact on our carbon footprint, as seen in the table below.

Newark and Sherwood District Council's Carbon Footprint		
2018/19	2019/20	2021/22
2,165 tCO ₂ e	Not gathered due to Covid	2,483 tCO ₂ e

- 3.7 Therefore, we have increased our carbon footprint by 15% since 2018/19. However, if we do a 'like for like' comparison. This means measuring our footprint without the vehicles purchased for new services and energy spent on new facilities, such as the pool. When comparing like-for-like, our carbon footprint is 2,060 tCO₂e. This is a 5% reduction since 2018/19.
- 3.8 Please see the graphs below for a breakdown of the carbon footprint this year and in the baseline year.

Fig.1 2018/19 Carbon Footprint Breakdown





3.8 The setting of the target and the annual monitoring has shown how we need to be mindful of our energy consumption in both our operational practices and strategic decision making and how these decisions will impact upon our carbon footprint. Moving forwards we plan to consider energy efficiency recommendations from the Decarbonisation Plan, recruit a decarbonisation Project Surveyor with responsibility for energy and our Corporate property team will continue to review energy consumption and understand energy profiles for each building and determine a tolerance level to carry out investigations. Cabinet reports now also feature an environment section for report authors to consider when submitting reports for decision.

3.9 We remain confident that our 2035 target for net carbon neutrality is achievable, particularly with the projects presented in this report, the decarbonisation of the electric grid network in 2030 and our ability to offset any residual emissions if absolutely necessary at a point in time.

4.0 **Financial Implications (FIN22-23/3110)**

4.1 **Green Rewards**

4.1.1 As outlined, this is a joint procurement exercise between all Nottinghamshire Councils and the continued subscription to the App the cost will be subject to review. Subsequent years' expenditure has been included in the Transformation Revenue budget for 22/23 and 23/24 should we decide to continue.

4.2 **Climate Change budget allocation**

4.2.1 The Capital Programme has a budget for Climate change of £330k. Current actuals and commitments to date against this project are listed below:

	Original Budget	Revised Budget	Spend to 30 September 2022	Commitments
Climate Change	330,000	205,000	36,900	60,000
LED Lighting – Beacon		53,500		
Boiler - Beacon		71,300		
Total	330,000	330,000	36,900	60,000

Expenditure to date relates to Solar PV Consultation and Procurement. Commitments are £30,000 for the Decarbonisation Plan and £30,000 for the Brunel Drive Review.

4.3 **Solar PV**

4.3.1 Solar PV installation budget is £685,250 approved at Policy and Finance Committee in November 2021, the projected completion date is 2023. A full breakdown of the costs presented to that meeting is below.

4.3.2 some further work needs to take place to investigate whether the electricity savings given the current costs of electricity need to be revised, along with the annual maintenance costs.

Narrative	To Progress					Total
	The Beacon	Vicar Water	Newark S&F	Southwell LC	Ollerton Dukeries Leisure Centre	
Construction	85,050.00	47,550.00	228,800.00	185,050.00	116,300.00	662,750.00
Project Management	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	22,500.00
Capital Costs	89,550.00	52,050.00	233,300.00	189,550.00	120,800.00	685,250.00
Financing						
Annual MRP (25 year life)	3,582.00	2,082.00	9,332.00	7,582.00	4,832.00	27,410.00
Interest - 2.23%	1,996.97	1,160.72	5,202.59	4,226.97	2,693.84	15,281.08
	5,578.97	3,242.72	14,534.59	11,808.97	7,525.84	42,691.08
Cost of Maintenance	366.00	183.00	1,067.50	854.00	518.50	2,989.00
Annual Costs	366.00	183.00	1,067.50	854.00	518.50	2,989.00
Total Annual Costs	5,944.97	3,425.72	15,602.09	12,662.97	8,044.34	45,680.08
Annual Electricity Savings	7,274.40	3,609.95	19,701.50	15,761.20	9,569.30	55,916.35
Net Annual Surplus/Loss	1,329.44	184.23	4,099.41	3,098.24	1,524.96	10,236.27

Background Papers and Published Documents

Climate Emergency Strategy

Greening Newark and Sherwood Action Plan